

EXHIBIT A



EXPERT REPORT OF THOMAS C. AUSTIN

prepared at the request of counsel for defendants in

City of New York v. Amerada Hess Corp., et al.

January 23, 2009

Expert Report of Thomas C. Austin

My name is Thomas C. Austin. I have been employed since 1981 as a founding Senior Partner at Sierra Research, Inc. (Sierra), an environmental consulting firm located at 1801 J Street, Sacramento, California. Sierra specializes in research and regulatory matters pertaining to air pollution control, and does work for both private industry and governmental clients, including the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB). My particular area of expertise is control of motor vehicle emissions. My responsibilities at Sierra include staying abreast of all developments related to motor vehicle emissions control, including changes in gasoline and Diesel fuel specifications and composition.

Prior to my employment at Sierra, I was a Deputy Executive Officer at CARB from 1975 to 1978, in which capacity I supervised CARB's motor vehicle emissions control program. From 1978 to 1981, I was the Executive Officer at CARB, and was responsible for overseeing the development and EPA approval of State Implementation Plans. I was also responsible for directing all regulatory and research activities of the staff, including both stationary source and mobile source emission control programs.

Other professional experience includes previous work for the U.S. EPA at its motor vehicle emissions laboratory in Ann Arbor, Michigan. I am a member of the Society of Automotive Engineers, Inc. (SAE). Throughout my professional career, I have continuously participated in the design and implementation of numerous technical studies, and the publication of the results of those studies, in the fields of automotive emissions measurement and control, impacts of fuels on emissions, and fuel economy.

A true and correct copy of my resume, including a list of my publications, is attached as Attachment A.

My firm is being compensated at the standard hourly rate of \$195 for my work in this case, other than for time related to deposition and trial testimony, for which my firm is being compensated at the standard hourly rate for such services of \$275.

The cases in which I have testified as an expert at trial or by deposition within the preceding four years are Central Valley Chrysler-Jeep, Inc., et al. v. Catherine E. Witherspoon, et al. (U. S. Dist. Court, E. Dist. of California – Fresno, No. CIV-F-04-6663 REC-LJO); and Green Mountain Chrysler Plymouth Dodge Jeep, et al. v. Canute D. Dalmasse, et al. (U.S. Dist. Court, Dist. of Vermont, No. 2:05-cv-302; consolidated with Association of International Automobile Manufacturers v. Canute D. Dalmasse, et al., U.S. Dist. Court, Dist. of Vermont, No. 2:05-cv-304).

I. Opinions

My opinions and testimony set forth in this report are based on my own analysis of the impacts of the use of methyl-tertiary butyl ether (MTBE) in gasoline on emissions of carbon monoxide (CO), volatile organic compounds (VOCs), and oxides of nitrogen (NOx), all of which are air pollutants from on-road motor vehicles, non-road motor vehicles, and other equipment that uses motor vehicle gasoline. Models, studies, papers, and other documents that I have relied upon in performing my analysis are identified in this report.

In my opinion, the use of MTBE as a gasoline oxygenate pursuant to the federally mandated Oxygenated Fuels and Reformulated Gasoline (RFG) programs substantially reduced emissions of CO, VOCs, and NOx from on-road motor vehicles, non-road motor vehicles, and other equipment fueled with motor vehicle gasoline. The emission

reduction benefits of MTBE were realized relative to non-oxygenated conventional gasolines as well as ethanol-containing reformulated gasolines. The benefits attributable to MTBE use relative to non-oxygenated conventional gasolines include the following:

1. Reduced emissions of carbon monoxide;
2. Reduced public exposure to ambient carbon monoxide;
3. Reduced emissions of VOC and NOx due to RFG; and
4. Reduced public exposure to ambient ozone.

The benefits attributable to MTBE use instead of ethanol as a gasoline oxygenate in RFG include:

1. Reduced emissions of VOC and NOx; and
2. Reduced public exposure to ambient ozone.

As my work in this case is on-going, I may update and revise my analysis and conclusions.

II. Background

As I described above, the purpose of this report is to describe the emission reduction benefits resulting from the use of MTBE as a gasoline additive, particularly as a means of compliance with federal Oxygenated Fuels and RFG requirements in relation to continued use of conventional non-oxygenated gasoline and the use of ethanol instead of MTBE as a gasoline additive. In order to put the emission reduction benefits of MTBE into proper perspective, a number of issues related to air pollution, emission sources, and emission controls need to be addressed, at least in a summary fashion.

ATTACHMENT A

Résumé

Thomas C. Austin

Education

1969, B.S., Mechanical Engineering, Automotive, University of Michigan

Post-graduate university and private training courses in management, negotiation, combustion engine emissions, and financial analysis.

Professional Experience

7/81 to present Senior Partner
Sierra Research

Founder and partner in a consulting and research firm specializing in air pollution control-related issues. Experience with Sierra includes lead responsibility for motor vehicle-related projects involving (1) the use of a vehicle simulation model to examine the potential for increasing fuel economy and reducing greenhouse gas emissions; (2) evaluation of the cost and effectiveness of emissions standards proposed for adopted by the California Air Resources Board and the U.S. Environmental Protection Agency; (3) assisting state and local governments with the design, implementation, and evaluation of motor vehicle inspection and maintenance (I/M) programs; (4) analysis of the air pollution and fuel economy impacts of alternative fuels and reformulated gasoline; (5) evaluation of refueling emissions controls for vehicles and gasoline stations; (6) analysis of vehicle operation in customer service and the development of new dynamometer driving cycles to better represent area-wide and facility-specific travel; (7) preparation of air quality elements for general plans; and (8) providing expert witness services to clients involved in litigation related to motor vehicle emissions and fuel economy.

11/78 to 7/81 Executive Officer
 California Air Resources Board

Served as chief executive officer of California's air pollution control agency (annual budget: \$50 million). Principal responsibilities included the management of approximately 550 employees working in the areas of (1) motor vehicle emission control, (2) air pollution law enforcement, (3) air quality monitoring and modeling, (4) research into the environmental effects of air pollution, and (5) industrial source emission control. In addition to the management of scientists, engineers, lawyers, and planners, routine

duties included private and public interaction with the U.S. Congress, the State Legislature, and elected officials who are responsible for the operations of local air pollution control districts.

11/75 to 11/78 Deputy Executive Officer
California Air Resources Board

Planned and managed most of the agency's technical programs. Direct responsibilities included the management of approximately 300 employees in the Air Resources Board's Research Division, Vehicle Emission Control Division, Stationary Source Control Division, and the Legal Affairs and Enforcement Division.

Major program responsibility included (1) the development of regulations to provide further control over oxides of nitrogen and sulfur dioxide emissions from large industrial and utility boilers, (2) management of a pilot program to evaluate the cost-effectiveness of motor vehicle inspection and maintenance, (3) development of new vehicle emission standards for light, medium, and heavy-duty vehicles, (4) development of a certification program for hydrocarbon vapor recovery systems to be used at gasoline service stations, terminals, and bulk plants, (5) an evaluation of the air pollution impact of ethanol-gasoline blends, and (6) an evaluation of the air pollution impact of a terminal to off-load tankers carrying Alaskan North Slope oil at the Port of Long Beach.

Routine duties included testifying before committees of the State Senate and Assembly during budget hearings and during hearings on legislation affecting the Air Resources Board's programs.

10/71 to 11/75 Project Manager
U.S. Environmental Protection Agency
Emission Control Technology Division

Served as the manager of projects on advanced engine/emission control system evaluation and motor vehicle fuel economy. Developed program plans and directed the activities of test engineers and technicians who conducted dynamometer, track, and road tests of prototype and production motor vehicles. Authored many reports evaluating the fuel economy, exhaust emissions, and performance of vehicles powered by Diesel engines, stratified charge engines, and modified conventional engines. Participated in the development of driving cycles and test procedures for fuel economy testing using chassis dynamometers.

Served on an interagency task force which made recommendations to the Congress on passenger car fuel economy standards and served as a hearing panel member during hearings conducted by the Environmental Protection Agency regarding automobile manufacturers' requests for suspension of emission standards.

Served as project officer on several contracts for both testing and analytical services from private organizations.

9/69 to 10/71

Mechanical Engineer
U.S. Army Tank-Automotive Command

Served as a project engineer on several projects including (1) diagnosis of engine failures occurring in combat vehicles operating in Vietnam, (2) study and testing of compound/combined cycle engines for improved energy efficiency, (3) testing of stratified charge engines for the "jeep" vehicle, (4) development of an improved cooling system for high mobility trucks (lead responsibility), (5) development of an emission control system for the standard M151 jeep vehicle. Designed prototype hardware for testing purposes.

Other Experience

1978-2002 Guest lecturer at University of Michigan summer courses in automotive emission control.

1980 Consultant to the Department of Energy/Solar Energy Research Institute, on conservation and the use of alternative fuels in the transportation sector.

1977-78 Consultant to the Federal Trade Commission in the area of fuel economy advertising.

Credentials and Memberships

Society of Automotive Engineers, Inc. (SAE)

Four years service as Vice-Chairman of the SAE Fuels and Lubricants Committee, and in this capacity, planned and organized over thirty SAE technical sessions. Also served as Chairman of the Peer Review Committee for fuels-related technical papers.

Certified as a Qualified Environmental Professional by the Institute of Professional Environmental Practice in 1994.

Selected Publications (Author or Co-Author)

"Summary of Motor Vehicle Inspection and Maintenance (I/M) Programs in the United States and Canada," Sierra Research Report No. SR2008-12-02, December 2008.

"Motor Vehicle Inspection and Maintenance (I/M) Programs in the United States and Canada," Sierra Research Report No. SR2008-12-01, December 2008.